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The Case of Inner London East as a European ICT Pole of Excellence:

Experts' Insights into Public Policies

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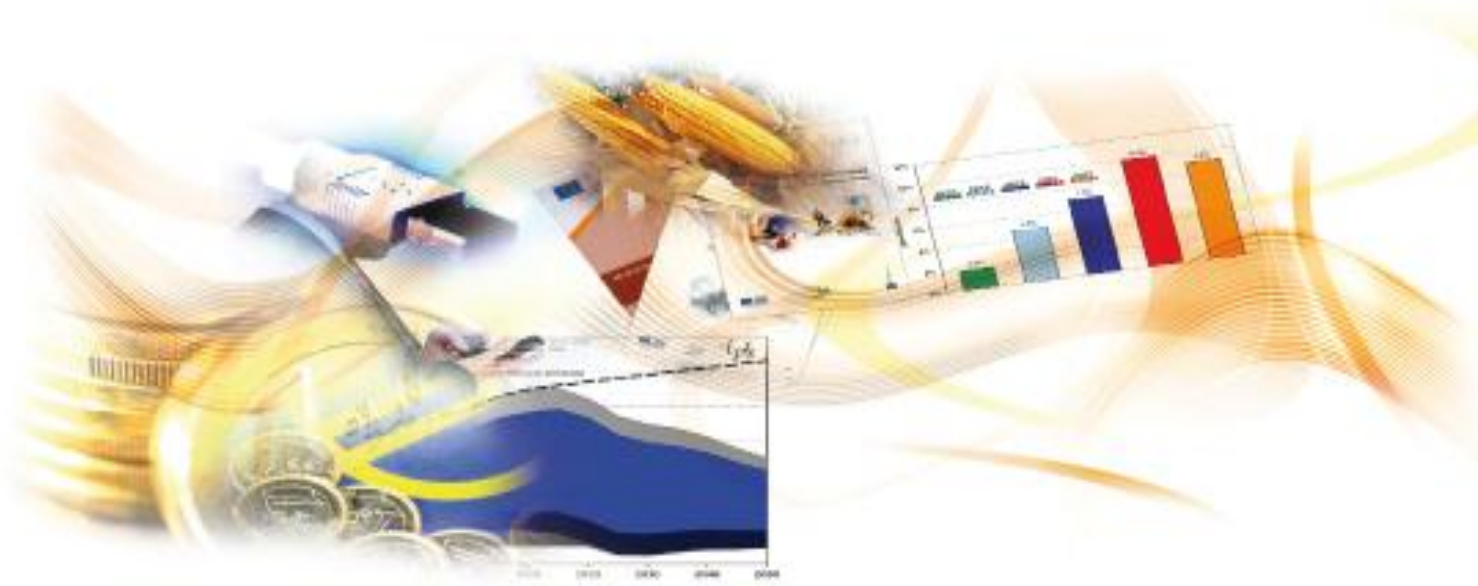

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These pages largely consist of an edited summary of the report authored by Max Nathan, Emma Vandore and Rob Whitehead: "A tale of Tech City: the future of Inner east London's digital economy", Centre for London, 2012, complemented with additional data and analysis. We have tried to be faithful to the above-mentioned original text as that report offered, in our view, a sound mix of scientific approach, documentary background and policy analysis. The original authors cannot be made responsible for any mistake or misinterpretation introduced while editing the original text for the purpose of this report.

This summary also draws on: Mapping the Digital Economy, Cities institute, London Metropolitan Business School, 3 May 2011 and several additional sources, usually quoted in the footnotes and listed in the bibliography.

Preface

The European ICT Poles of Excellence (EIPE) research project is a joint project of DG CNECT and the JRC Institute for Prospective Technological Studies (Project Nr 31786-2010-06). It investigated the issues of growth, jobs and innovation, which have become the main priorities of the European Union's growth strategy programme 'Europe 2020'. The overall objectives of the EIPE project are to set the general conceptual and methodological conditions for defining, identifying, analysing and monitoring the existence and progress of current and future EIPE, in order to develop a clear capacity to distinguish these among the many European ICT clusters, observe their dynamics and offer an analysis of their characteristics.

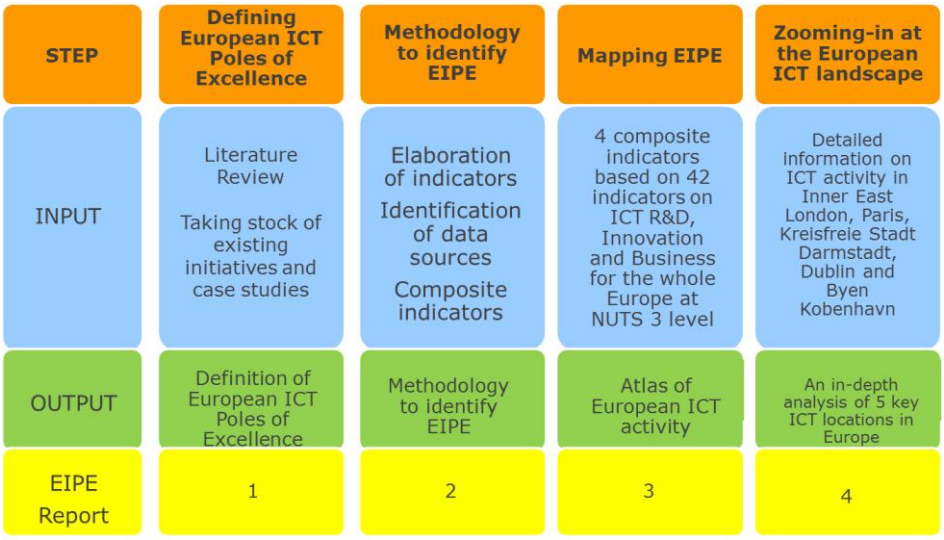
The EIPE project spanned the period between 2010 and 2013. Over this time, it developed a tool based on a database of original ICT activity indicators, which was enriched with geographical information to allow localisation and aggregation at NUTS 3 level. The tool helps to answer such questions as:

- How is ICT R&D, innovation and economic activity distributed in Europe?
- Which locations are attracting new investments in the ICT sector?
- What is the position of individual European locations in the global network of ICT activity?

The EIPE project had four main steps (see Figure **1**). First, European ICT Poles of Excellence were defined. Second, a statistical methodology to identify EIPE was elaborated. Third, the empirical mapping of EIPE was performed and fourth, an in-depth analysis of five NUTS 3 regions was undertaken. This work was documented in a series of EIPE reports:

- Defining European ICT Poles of Excellence. A Literature Review,
- Identifying European ICT Poles of Excellence. The Methodology,
- Mapping the European ICT Poles of Excellence. The Atlas of ICT Activity in Europe.
- Analysing the European ICT Poles of Excellence. Case studies of Inner London East, Paris, Kreisfreie Stadt Darmstadt, Dublin and Byen Kobenhavn.
- Key Findings and Implications of the European ICT Poles of Excellence project.

Figure 1: Overview of the EIPE project



More information on the European ICT Poles of Excellence (EIPE) project can be found under: http://is.jrc.ec.europa.eu/pages/ISG/EIPE.html

1. Introduction

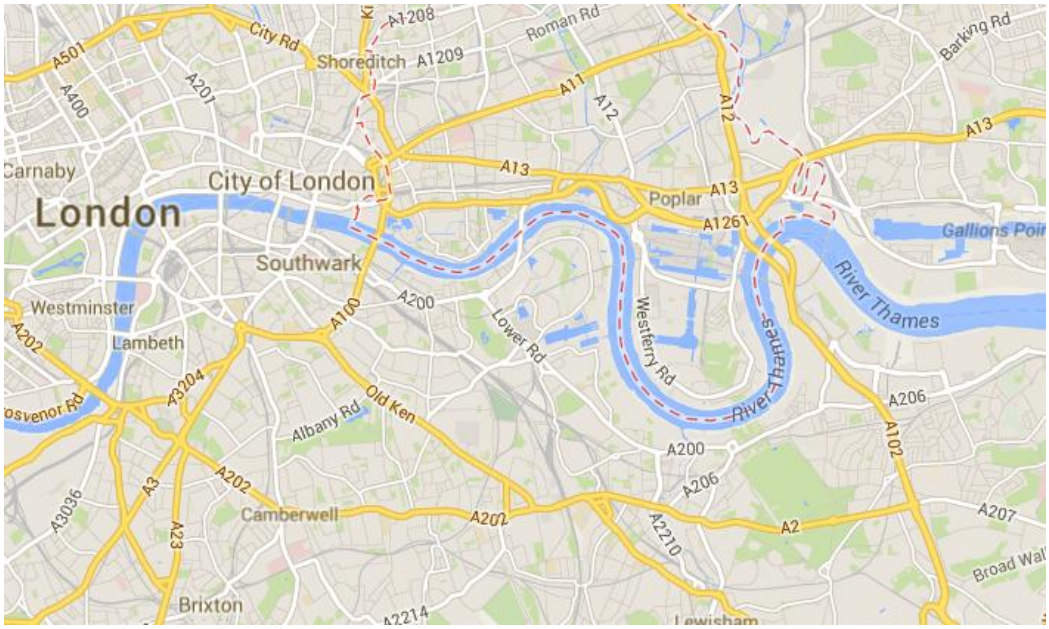
This report comes as a complement to the EIPE case study report. It presents some of the public policies that local experts believe were intended to forge the profile of the ICT activity in the region of **Inner London East** (code UKI12), a NUTS 3 level region.[1]

1.1 Background

It is the eastern part of a broader NUTS 2 level region, Inner London, which has the highest level of GDP per capita in Europe (Eurostat, 2013).

The map below shows the Greater London area (UKI). Inner London (UKI 1), which is composed of **Inner London East** (12) and **West** (11), is in the centre of the map.

Inner London East, on the right-hand side of the map below, is composed of several boroughs: Hackney, Islington, Lambeth, Lewisham, Newham, Southwark, Tower Hamlets. It has a population of around 2 Million people.



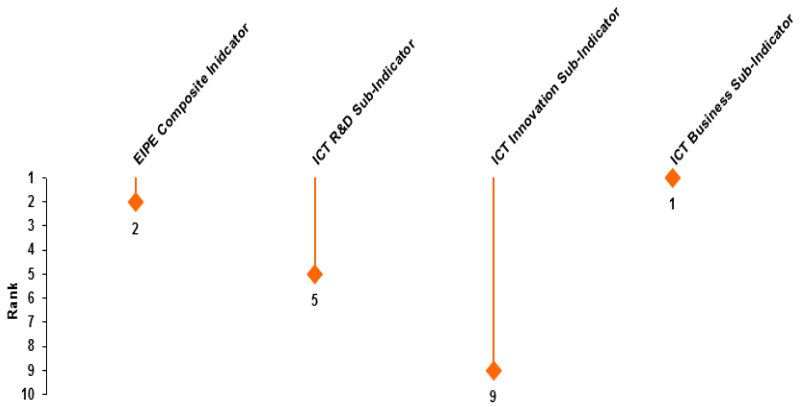
[1] Nomenclature of Territorial Units for Statistics (NUTS). For a list of the European statistical regions see: http://epp.eurostat.ec.europa.eu/portal/page/portal/nuts_nomenclature/introduction.

1.2 Inner London East's Profile in Global Indexes and EIPE

1.2.1 Inner London East in the EIPE ranking

Inner-London East (UKI12), henceforth London, reached the 2nd place among 1,303 regions in Europe according to the EIPE final composite indicator ranking (Figure 2). It was only surpassed by the Kreisfreie Stadt Munchen region. Figure 2 shows London's position by individual sub-indicators. According to this information, London comes 5th in R&D, 9th in innovation and 1st in business activity ranking.

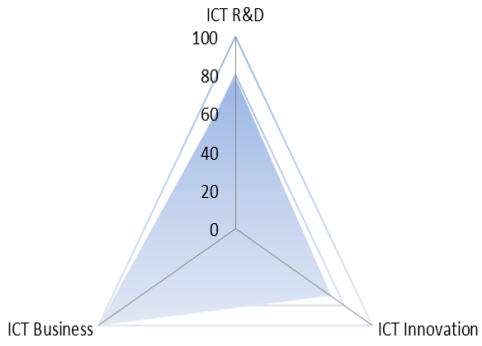
Figure 2: London in the EIPE ranking by EIPE composite indicator, ICT R&D, Innovation and Business sub-indicators



Note: The graph shows the performance of Inner London East in the overall EIPE ranking and the ICT R&D, ICT Innovation and ICT Business ranking. The scale represents the rank in comparison with the remaining 1302 European Nuts 3 regions. For further methodological details please refer to (De Prato and Nepelski 2013).

Its relative performance in all three domains, i.e. ICT R&D, ICT innovation and ICT business is depicted in Figure 3. This figure shows that Inner London East, in comparison with the remaining 1,302 EU NUTS 3 regions, is particularly strong in ICT business activities and slightly less strong in ICT R&D and ICT innovation activities.

Figure 3: Performance of Inner London East in ICT R&D, Innovation and Business



Note: The graph shows the performance of Inner London East in the ICT R&D, ICT Innovation and ICT Business rankings. The scale represents normalized scores with maximum 100 and minimum 0. The rankings are based on the analysis of 1303 European Nuts 3 regions. For further methodological details please refer to (De Prato and Nepelski 2013).

1.2.2 Inner London East in global indexes

Today, London's Tech City is a high growth phenomena riding on the shoulders of a giant: the global city. The policies of today are built on those of the past, successful or otherwise, and are related to infrastructures, international environment, international investment, highly qualified labour force, presence of major international companies, rule of law, culture and arts, important public services, central government services, etc.

London is the European global city[2] in the world-class league. It faces both challenges and opportunities as a result of being in that class. A. T. Kearney's global cities index is one of many rankings of this kind which capture the main specificities of global cities and allow us to understand how these can offer fertile foundations for an ICT Pole of Excellence.[3]

A. T. Kearney's global cities index measures the global engagement of cities across 5 dimensions: business activity, human capital, information exchange, cultural experience and political engagement. Despite the financial turmoil of the past few years, New York and London have consistently led the ranking in all three editions of the Index. Though Paris and Tokyo swapped positions in 2012, together with New York and London, they are always far above the rest of the Top 10.

In the 2010 ranking,[4] London;

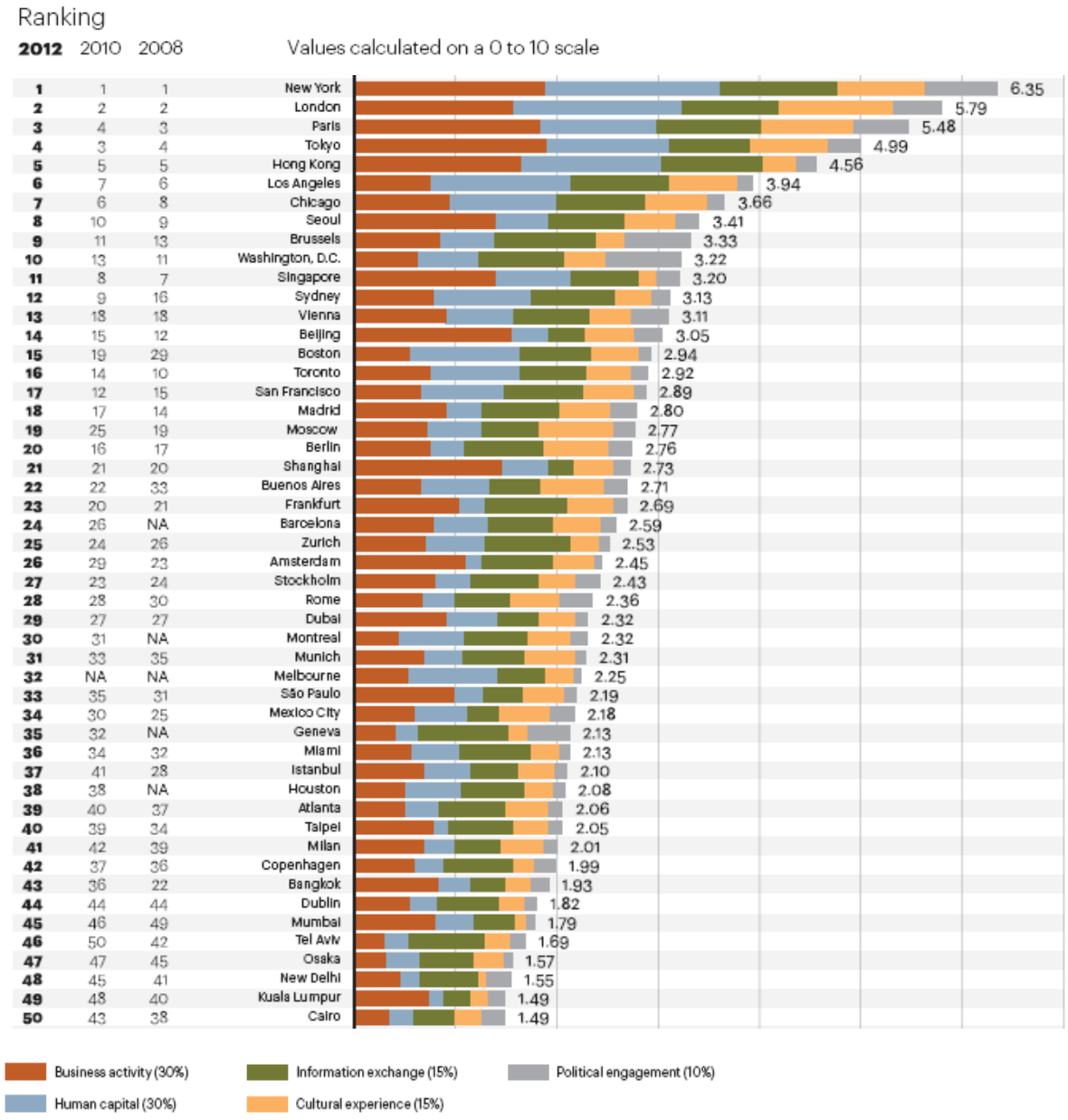
- came 1st in human capital, the only European city in the Top 10, ahead of New-York, Los Angeles, Chicago, Hong-Kong, etc.
- came 1st in cultural experience, surpassing its nearest competitor, Paris, followed by New-York, Tokyo and Moscow.
- came 3rd in information exchange, after New York and Geneva and is closely followed by Brussels, Paris or Berlin.
- lagged behind in 5th place in business activity after New York, Tokyo, Paris and Hong-Kong, and is closely followed by various Asian cities.
- also lagged behind in political engagement, ranking a low 6th behind Washington, New York, Brussels, Paris and Tokyo.

[2] A global city (also called world city or sometimes an alpha city or world centre) is generally considered to be an important node in the global economic system. The concept comes from geography and urban studies and rests on the idea that globalization can be understood as largely created, facilitated, and enacted in strategic geographic locales according to a hierarchy of importance to the operation of the global system of finance and trade. The most complex of these entities is the "global city", where the linkages binding a city have a direct and tangible effect on global affairs through socio-economic means. The use of "global city", as opposed to "megacity", was popularized by sociologist Saskia Sassen in her 1991 work, The Global City: New York, London, Tokyo - Princeton University Press. ISBN 0-691-07063-6 (Extract from Wikipedia – Global city query).

[3] The following section is inspired by the 2010 and 2012 A. T. Kearney reports on the Global Cities Index. Both reports are available at: http://www.atkearney.com/gbpc/global-cities-index

[4] The list of indicators taken into account by A T Kearney for each of the 5 dimensions is listed in Annex and can be found in each of their reports.

Figure 4: AT Kearney's Global Cities Index, 2012



Source: 2012 Global Cities Index and Emerging Market Outlook study by A.T. Kearney and The Chicago Council on Global Affairs

While this diagnosis can always be challenged on one indicator or another, it still offers a very good insight into the huge concentration of means and opportunities that are located, and growing, in a global city like London. It also underlines the deep roots this achievement has in European and world economic history. A. T. Kearney reports, in a rather deterministic interpretation, that only very few other European cities[5] seem to be gaining ground.[6] Path dependency is set as a rule. A similar perspective is given by the Global Cities Investment

[5] Namely Brussels (from 13th to 9th position since 2008), Vienna (from 18th to 13th), Barcelona (24th in 2012), Rome (28th), Munich (31st). Surprisingly perhaps, Madrid, Berlin or Frankfurt have tended to lose ground. In the latter two cities, this could perhaps be because of the distributed leadership that marks Germany

[6] Interestingly enough, the 2012 A T Kearney report focuses on the existence of emerging cities, referring to the growing role at global level of Seoul. Singapore, Beijing, Shanghai, Mumbai and more generally various cities usually located in the BRICS countries. The report puts forward the hypothesis that State-to-State geopolitics are being replaced by urban vectors (as i.e. the triads Washington/New-York/Chicago; Beijing/Hong-Kong/Shanghai).

Monitor[7] which has tracked FDI[8] since 2003. In this analysis, London comes 1st in cumulated international investments for the period 2008-11 and also for the year 2011, with 42% of these investments going to ICT projects.

Table 1: London and Paris in the Global Cities Investment Monitor[9]

	Cumulated Greenfield investment (2008-2011)	Greenfield investment (2011)	Share of greenfield investment at country level (2011)	Share of ICT investment (2001)
London	1st	1st	39%	42%
Paris	6th	10th	35%	36%

Clearly, Inner East London can be seen as an inner-urban hotspot, which builds heavily on the assets of a global city.

Consequently, the UK's digital economy is largely clustered in London. The city has nearly 24% of British jobs in computer and related activities, and 22% of telecommunications jobs. For digital content, the figures are even higher. *Centre for London* research shows Inner East London's digital firms are closely related to both financial and business services, and to London's creative industries. Inner East London and other digital hotspots have emerged organically within London's neighbourhood fabric, rather than being planned 'innovation zones'.

From a local perspective, Inner East London's is one of several digital economy zones in the capital, probably the most dynamic, and the eastern end of a high-tech corridor running through the centre. Its combination of history (City Fringe etc.), location (next to Central London and the City) and industry mix is seen as unique.

In 2013, London's Tech City topped the chart for new business generation in the UK, launching 15,720 new businesses in the Silicon Roundabout area between March 2012 and March 2013. Accountancy firm UHY Hacker Young, which carried out the research, largely attributes the growth to the area's reputation as the UK's technology hub, as well as regeneration and investment in new infrastructure. Colin Jones, Partner at UHY Hacker Young, adds, "The area around Old Street has been an emerging business destination for some time thanks to relatively cheap rents, but since the internet and app industries started to colonise the area, new business creation has really taken off. (...) It's also interesting to see how influential the City and finance still are in driving new business creation, despite the battering they took during the financial crisis. St. James's is no longer the preserve of gentlemen's clubs, it is now the backyard of the international super-rich and many former City bankers are setting up shop in the area to service that community".[10]

Compiled by research specialist GfK in collaboration with TechCityInsider, the TechCity Futures report (2013) offers an important glimpse into the thoughts and opinions of Silicon Roundabout decision-makers, and draws attention to a number of the issues affecting London's Tech City enterprises. Key findings include a perceived Silicon Roundabout talent drought, with 44% of the Tech City business leaders surveyed saying that finding skilled workers like coders and developers was the biggest challenge facing their organisations. Talent retention was also a major problem with 42% of those questioned saying that they found it difficult to hold on to their best people. Elsewhere, a third of Silicon Roundabout executives felt that their growth was being impeded by a lack of funding, with a further 29% adding that business expansion

7 KPMG/Paris-Ile-de-France Capitale Economique, 2013. Global Cities Investment Monitor 2013.

8 The investments, called "greenfield investments" taken into account by KPMG/Paris-Ile-de-France Capitale Economique are specifically those addressing the creation of new activities and jobs, and exclude mere joint ventures, M&A, privatisations, alliances or financial investments.

9 Based on the Global Cities Investment Monitor 2013. Barcelona is the only other EU city which appears in the top 10 for *cumulated* FDI for the period 2008-11. For 2011, in addition to London and Paris, Barcelona appears in 12th position, Dusseldorf in 13th and Dublin in 15th.

10 More at itportal: http://www.itproportal.com/2013/07/16/londons-tech-city-tops-uk-new-business-chart-with-15000-new-startups-last-year/#ixzz2ZJmntyDr

opportunities were being missed as a result.[11] Obviously, such level of concentration has its inherent downturns.

2. The Policy Framework and the Main Public Actors

2.1 A Long-standing Evolution[12]

In Inner East London, on the fringes of The City, the rapid emergence of 'creative digital' and 'technology' firms has been noted. (Re)location on the fringe of established business and creative clusters has facilitated new forms of convergence between sectors of the economy, notably publishing, printing and advertising with software and data services, encouraging early adoption of digital formats. Early adopters engage with software developers and the cycle continues. The question of geography – who does what where - was brought into sharp relief when the Technology Strategy Board announced its £1m package of financial support for 'Shoreditch'"in April 2011.

The story stems back to November 2010, with David Cameron's speech to East London technology firms. Hailing the buzz of the Shoreditch area, in Inner East London, and drawing heavily on the imagery of Silicon Valley, the Prime Minister set out an ambitious agenda to develop Inner East London into 'one of the world's great technology centres'.

In fact, the Inner East London digital cluster has been around for many years, with roots extending back past the first dot-com boom to the mid-1990s. The 'City Fringe', as it was then known, was already developing a reputation as a neighbourhood combining creative and business service activities with firms deploying nascent digital technologies (Cities Institute, 2011). Research done by Centre for London shows that the Inner East London hot zone centred on Clerkenwell and Hoxton is part of a corridor of high-tech activity across inner London – and the most distinctive of many tech hotspots in the capital. And as their analysis makes clear, the cluster grew substantially – but quietly – until the middle of the noughties. Then in summer 2008, the Financial Times ran a diary piece on 'Silicon Roundabout', and the secret was out.

Actually, the story starts much earlier: the analysis at firms and employment levels by Centre for London shows rapid growth in the late 1990s and mid-2000s, with the last few years showing a flattening-off as the wider economy turned down. The numbers of digital economy firms have essentially doubled from 1997 to 2010: from 1,591 to 3,289 in Inner East London, and from 826 to 1,599 in the core zone. Within this, growth is driven by digital content firms. Looking at employment numbers, digital economy employment rose a lot faster in Inner East London than it did for the city as a whole, more than doubling between 1997 and 2010 (From 12 931 to 48 586).[13] As with firm counts, digital content jobs have outnumbered ICT. The area has increased its share of London's digital economy jobs from about 8% to over 12%, a rise of a third since 1997. Notably, while digital economy employment in Greater London fell by 16,000 during 2009 to 2010, it rose inside the cluster. On both firm numbers and employment trends, then, the cluster is consolidating its digital content character.

Since the late 1990s, the area has seen a growing number of digital firms, especially in digital content: firm counts are much higher than previous estimates have suggested. Employment has also risen over the long term. However, it is not immune from wider economic trends. Since the late 2000s, though, the business base and overall job growth has flattened; only digital content activity has continued to grow.

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11 More in TechCity Futures Report, GfK – TechCityInsider (2013).
Available at: www.divshare.com/direct/24112891-ed7.pdf

12 Several of the following paragraphs are edited extracts from: Mapping the Digital Economy, Cities institute, London Metropolitan Business School, 3 May 2011. 13 pages

13 In total, some 392,000 staff now work in the tech arena in London, with approximately 48,000 (12%) working in and around East London's Tech City. Across London, digital firms such as Yelp, Living Social and Facebook are all seeing their headcount numbers grow, into the hundreds in the cases of LinkedIn and Skype over the last two years. (London & Partners, Press Release, 10 August 2012).

Foord, J. (2012). The new boomtown? Creative city to Tech City in east London.

This paper presents an initial analysis of a putative creative digital cluster (variously labelled Silicon Roundabout, Digital Shoreditch and latterly Tech City) which emerged in east London in the immediate aftermath of the 2008 financial crisis. Drawing on spatial analysis of sector and firm level data, the eastward trajectory of a new wave of digital creative activity, and its particular mix of co-located sectors, is placed within the wider context of the geography of London's creative and digital economies. The paper suggests that the particular dynamics of this cluster – its sector combinations, markets and firm organisation – are creating a localised spike of economic vitality, albeit one measured in terms of the number of creative digital firms, rather than by the number of jobs generated for local residents. Further analysis of secondary data and a sample of 261 firms suggests that the simplistic imagery of Silicon Roundabout as the centre of a cluster of technology companies is questionable. Instead it is argued that the current vitality emerges from risky experimentation *across* co-located sectors in which hitherto unrelated knowledge and activities (for example, software and advertising) are being combined. A core role is suggested for hybrid firms, creative digital agencies, which blend creative advertising, market research and branding with web design, social media analytics and software development. These firms stimulate demand for software and applications development and show many of the characteristics already identified for creative SMEs, including their tendency to agglomerate in and benefit from specialised clusters within urban economies (Comunian, Chapain, & Clifton, 2010). However, these firms also appear to have internalised the sector and skill diversity commonly identified as the primary positive externalities of urban economies while cultivating international networks and markets. A complex phenomenon is emerging which is contingent on its particular urban setting and does not strictly adhere to current policy models of urban creative clusters..

Briefly, London has seen a "technology corridor" emerge over the past few decades, within which Inner East London, with its "Tech City", appears to be the most relevant and dynamic part. It hosts an important mix of digital content (and also financial and business services) and IT firms. The latter have grown, the present report states, because:

- London is a global city, which attracts and hosts knowledge and financial flows;
- consequently, it favours the rise of a strong and modern business dynamic;
- growth is supported by a high number of generic pro-entrepreneurship policies developed at all levels (national, local).

However, the current crisis has hit this emerging economic activity. Whether there is a need for public intervention to help the Tech City and, if so, how this should be oriented is under debate.

2.2 Policies creating Favourable Business Conditions

Cross fertilising with the exceptional environment created by the development of the global city, the progressive development of Inner East London has benefited from a battery of policy interventions at national and local level, some of which are listed below.

2.2.1 Key national policies relevant to Tech City

- *Mentoring and advice*: the BIS national business mentoring scheme, and the £200m Growth Challenge business advice scheme;
- *Skills*: the Entrepreneur Visa, for individuals outside the EEA with a business idea and at least £50k committed funding;
- *Finance*: doubling Entrepreneurs' Relief to £10m; a number of early-stage finance initiatives, including doubling the limit for the Enterprise Investment Scheme to £1m; the Seed Enterprise Investment Scheme offering 50% tax relief on seed investments up to £100–150k, and the Angel CoFund, with £50m of Regional Growth Fund money for early-stage finance; a £100m fund to explore crowd-funding and mezzanine finance for SMEs; the Technology Strategy Board's LaunchPad competition, with £200m of matched funding for 20 winning companies, and additional 'public venture capital' for the digital economy and other sciences, including £200m for Enterprise Capital Funds and £150m for the UK Innovation Investment Fund;
- *Workspace*: the Government makes empty public buildings available for entrepreneurs to use as start-up premises;
- *Connectivity*: a £100m high-speed broadband fund for ten 'super-connected cities', including London;

- *Business development*: the launch of the Government Digital Service, and the shift to 'digital by default' platforms for transactional services by 2015.

2.2.2 Developments initiated at London level

- *Mentoring and advice:* the Greater London Authority (GLA)[14] has supported consultancy support such as White Horse Capital's Accelerator Academy,[15] as well as access to finance initiatives such as City Meets Tech;
- *Skills:* IT apprenticeships in London have doubled between 2009/10 and 2010/11;
- *Business development:* the GLA's London Datastore[16] has boosted Open Data in the city; London & Partners helped 130 digital companies to invest in 2011;
- *Olympic developments* such as the Intel Incubator, the Cisco-UCL-Imperial Future Cities Centre and the Olympic Media Centre competition.

2.3 Changing Gear: Towards Hands-on Policy Intervention?[17]

"Our ambition is to bring together the creativity and energy of Shoreditch and the incredible possibilities of the Olympic Park to help make East London one of the world's great technology centres" – the Prime Minister, 4 November 2010.[18]

The proposals announced by the Prime Minister included:[19]

- Investment in new Technology and Innovation centres – including one in the Olympic Park;
- Reform of the visa system, to allow the employment of highly-skilled migrants needed for the industry;
- Review of intellectual property laws to make them fit for the 'internet age';
- Encouraging private business, universities and investors to support the Tech City vision. For example, BT has agreed to bring forward the roll-out of superfast broadband in the Old Street-Shoreditch area. A number of big digital companies such as Google, Facebook, Intel and Cisco have given support to the establishment of facilities and offices in Shoreditch/Old Street or the Olympic Park.

This landmark declaration of the UK Prime Minister announced a dedicated Tech City policy. It raised very rapidly a debate about its usefulness and adequacy. The following lines show how the debate was expressed in the Centre for London 2012 Report[20]

Inner East London's digital economy has come a long way in the last fifteen years. A thriving cluster of firms has emerged, centred on Shoreditch – and Centre of London's research shows it is bigger than previous estimates suggest. It is an important, high-value part of the London economy.

The best achievable outcome for this cluster, and for the London and UK economies as a whole, would be to maintain or enhance this trajectory. London's economy would benefit from the resulting growth in such high-value economic activity. Equally, evidence shows that firms in the area get real competitive benefits from their location, and so stand more of a chance of becoming global successes. For these reasons this cluster deserves further support. But there are risks for government: too much interference, or prioritising inappropriately could limit firms' opportunities for growth.

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14 http://www.london.gov.uk/mayor-assembly/gla

15 Consultancy in high growth technology companies: http://www.whitehorsecapital.co.uk/

16 http://data.london.gov.uk/

17 As is true for large parts of the above text, this is an edited extract of the arguments developed in the report authored by Max Nathan, Emma Vandore and Rob Whitehead: "A tale of Techcity: the future of Inner east London's digital economy", Centre for London, 2012. Strongly supported by economic literature, it develops a rather interesting critical view about the current policies developing around the Tech City in London.

18 The Prime Minister's East End Tech City speech, 4 November 2010, available online at: http://www.number10.gov.uk/news/east-end-tech-city-speech/

19 Extract from: Greater London Authority (2011). Tech City. Available at: http://www.london.gov.uk/moderngov/documents/s6204/

20 Several of the following paragraphs are edited extracts from the report of Centre of London (2012)

Will the Government's current approach deliver these outcomes? The current governmental Tech City strategy has three broad aims. It sets out to:

- Help the existing digital SME community, and encourage new entrepreneurship;
- Attract outside and foreign direct investment, especially from global tech players;
- Encourage its spread eastwards to the Olympic Park and surrounding areas, post-2012.

The Government's approach has both 'hands on' and 'hands off' elements. Its first aim is very much 'hands off', and so is consistent with both the evidence and the government's political preferences. In practice, the Government has brought in a long list of policies, from tax breaks to new visa rules, which aim to support and encourage entrepreneurs and investors by dealing with co-ordination problems and market failures. Ministers deserve credit for much of this.

The remaining two aims, to bring in foreign investment and to seed a tech cluster in the Olympic Park are more 'hands on'. The second aim, the drive to attract large foreign investors to Inner East London is, in many respects, laudable. Evidence shows that some FDI activities can complement domestic success. But the net effects of FDI crucially depend on the type of investment, ownership structures and local firms' capacity to absorb knowledge spillovers. Evidence shows Inner East London is an important, growing cluster, with a core of high-skill activities which would benefit from increased ideas flow. However, it also hosts a lot of very young, relatively inexperienced firms, with an evident lack of managerial and business development experience. There is a clear risk that without carefully planned FDI, competition effects will swamp any spill-over benefits. So it is critical that current FDI policies become much more tailored, to attract investments that are both high-value, and complementary to indigenous economic activity. Quantity is less important as a success measure than quality and fit of investment.

There is also a broader point here. Although promoting FDI can have many benefits, resources used to attract this might be better spent fostering the development of home-grown firms. Firms that own the ideas and the technology and keep their profits in the UK are likely to be far more beneficial to the UK than foreign-owned firms, however successful they may be. For these reasons, the first goal of policy for the cluster should be helping domestic firms that generate new products and services, and successfully sell them globally.

The final aim – to encourage the spread of the tech cluster into Hackney Wick, Stratford and the Olympic Park – is, on the face of it, a good one. However, extensive evidence shows that only a limited expansion of the cluster to this area is likely to occur. Yes, these locations have some potential for digital industry in the years to come, especially for larger firms which may have trouble finding suitable space in Shoreditch and surrounding areas. Rising property prices may also encourage some smaller firms into cheaper areas like Hackney Wick. However, Inner East London is part of a digital economy 'corridor', with many other ready-to-go locations for firms looking to relocate. Interviews indicate limited willingness to go further east, especially into Stratford. It may take many years before these neighbourhoods become as attractive to digital economy firms as the current cluster core, if ever. The history of master-planning clusters suggests the chances of success are limited. For all of these reasons, the opportunity costs of a 'go east' policy are high. Alternative strategies would highlight a number of priorities for London's existing digital SMEs. If the overall policy objective is to grow the city's digital economy, this is where resources should be focused first.

3. Some Lessons: the Hands-off / Hands-on Debate

Inner East London has been able to build its digital economy on the shoulders of a giant: the assets of a global city. As child of such city, the development of the pole of excellence shows to have started up to several decades earlier (1990 -), expanding and moving from the High-Tech corridor to Shoreditch. Those deep roots are partly attached to a long-standing hands-off national and local policy mix regarding business conditions and support to entrepreneurs and start-ups

The assets of the global city also show to have some downturns such as skilled labour drought, lack of *sufficient* sources of financing, or costly access to working spaces. Public intervention is expectedly at risk of targeting such deficiencies, generating a debate about its legitimacy and efficiency (see below).

These public interventions come with time, with the growing fame of a pole now coined Techcity and facing a targeted public intervention: the hand-off / hand-on policy debate is served. The following lines reflect some of the arguments developed by local experts[21]:

Global cities like London can serve as the natural home for the emergence of the digital economy. They offer an environment that can help firms become more productive.

Doesn't all of this suggest that there's no need for policy interventions? It is true that in reality firms and workers may make bad choices, face information or financial constraints on moving, or have to handle other co-ordination problems. Given the productivity payoffs from agglomeration, there is then a welfare case for policies that try to foster clustering. Digital economy businesses need cities like London to grow – and London should benefit from a bigger digital economy.

At this point, many policymakers reach for the traditional cluster playbook, and deploy *conventional area-level interventions*. These are typically physical or planning programmes – building a new science park, or zoning a neighbourhood as an 'innovation district'.

But this kind of approach rarely works: a physical cluster is the outcome of what entrepreneurs, firms and workers do. Because the cluster is an emergent property of all these interactions, it is very difficult to make policy at cluster level. A better approach is to focus on the firms and people within it. This information is then used to develop policies, which may include encouraging entrepreneurship, building workforce skills and management capacity, helping firms forge international links and paying attention to the workspace component.

The second area for intervention is the wider 'innovation ecosystem' that companies operate in – the key institutions and the key social, legal and local conditions that influence, help or hold back ideas and firms. Here, policymakers need to identify 'knowledge filters' – blockages in the innovation system, such as unhelpful intellectual property frameworks or an undersupply of early-stage finance. It's hard to promote innovation directly – but policymakers can influence the wider conditions.

Promoting foreign direct investment (FDI) is potentially a third point of intervention. In theory, FDI could act as a complement to policies which aim to develop domestic firms. For instance, knowledge may spill over from entrants to local firms, or local firms may benefit from supply chain relationships with entrants. Conversely, FDI may lead to greater competition, which in turn could lead to some domestic firms going out of business.[22]

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[21] The following paragraphs are edited extracts from the report of Centre of London (2012)

[22] Edited extract of the report: In practice, it is not easy to work out which of these effects, positive and negative, is strongest. There seem to be a number of critical mediating factors. First, ownership structure matters. There seems to be evidence of spillovers for jointly owned domestic and foreign firms, but not from wholly foreign-owned investments. Second, the type of FDI matters – investments which are complementary are more likely to have spillover effects. In this case, that means technology-intensive activities (such as R&D labs) or support services (such as finance). Third, there are sectoral differences – the biggest spillover effects come from manufacturing, and we have fairly little evidence for sectors like digital content. Fourth, critically, local firms' 'absorptive capacity' matters – that is, whether they have the human capital and managerial skills to benefit from new ideas, and to compete effectively.

All of this suggests there are potentially important roles for FDI in a Tech City-type strategy. But it needs to be carefully calibrated, based on detailed knowledge of firms in the cluster, and what is most beneficial to their long-term development.

All in all, the claim of the local experts and stakeholders is clear: hands-off policies to improve business conditions are much preferred to targeted 'conventional area-level interventions'. They challenge the capacity of public intervention to create clusters, or in this case, to support their further development by intervening directly in the urban space. They see the success of this pole as that of its businesses and recommend that policy support should be specifically targeted at young or tech companies or alternatively at hands-off general business conditions.

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Annex

Global Cities Index

A.T. Kearney's Global Cities Index ranks metropolitan areas according to 25 metrics across five dimensions:

- **Business activity** is measured by headquarters of major global corporations, locations of top business services firms, the value of a city's capital markets, the number of international conferences, and the flow of goods through ports and airports (weighting: 30 percent).
- **Human capital** evaluates a city's ability to attract talent based on the following measures: size of foreign-born population, quality of universities, number of international schools, international student population, and number of residents with university degrees (weighting: 30 percent).
- **Information exchange** examines how well news and information circulate within and outside the city. This dimension has been reconfigured this year to include two new metrics: accessibility to major TV news channels (replacing international coverage in major local newspapers) and Internet presence (capturing the robustness of results when searching for the city name in major languages). A third metric, number of international news bureaus, has been broadened to include 10 major TV networks. The final two metrics— level of censorship and broadband subscriber rate—are unchanged (weighting: 15 percent).
- **Cultural experience** measures diverse attractions, including number of major sporting events a city hosts; number of museums, performing-arts venues, and diverse culinary establishments; number of international travelers; and number of sister-city relationships (weighting: 15 percent).
- **Political engagement** reviews how a city influences global policy dialogue as measured by number of embassies and consulates, major think tanks, international organizations and local institutions with international reach that reside in the city, and the number of political conferences a city hosts (weighting: 10 percent).

As a compendium of analyses published in 2011, the 2012 GCI may represent data as far back as 2010. Thus, today's current events, such as instability in the European Union, can be expected to show up in our next set of rankings. A panel of academic experts and corporate executives informed and tested the global rankings.

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Abstract
The European ICT Poles of Excellence (EIPE) project is a joint research project of DG CNECT and the JRC Institute for Prospective Technological Studies. It established the conditions for defining, identifying, analysing and monitoring the existence and progress of current and future European ICT Poles of Excellence (EIPE), in order to distinguish these among the many European ICT clusters, observe their dynamics and offer an analysis of their characteristics.
A case study report investigates 5 selected EIPEs – Inner London East, Paris, Kreisfreie Stadt Darmstadt, Dublin and Byen Kobenhavn. It presents and interprets the data collected during the course of the project to understand the actual facts, context and story of each location, i.e. its R&D, innovation and business activity.
The case study report is complemented by 4 short notes, which offer the summarised views of local experts on the role played by public policies in the emergence and the sustainability of ICT activity in their region. This note is about Inner London East.

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